

Notice of Allowability

Application No.

09/744,946

Examiner

Mr. Terry K. Cecil

Applicant(s)

MALECOT ET AL.

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the appeal brief filed 9-7-2004 and the telephonic interview of 11-18-2004.
2. ☒ The allowed claim(s) is/are 14-23 and 25-26 respectively renumbered upon allowance as claims 2-8, 10, 9, 11-12 and 1.
3. ☒ The drawings filed on 10-1-03 (figure 1) and 1-31-01 (fig 2) are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 11-18-2004.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Note: Claims 14-23 and 25-26 are allowed and have been respectively renumbered upon allowance as claims 2-8, 10, 9, 11-12 and 1.

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Mary Breiner on 11-18-2004.

2. The application has been amended as follows:

- The claims have been amended as in the attached set of claims.
- The abstract has been replaced with the following:

—The invention relates to a filter system (10) including a filter element (14) for filtering a fluid within a cylindrical case (12). The filter element is an absorbent tissue paper material in the form of a sheet compactly wound to form inner winding turns therein and to form a tubular cylinder inside the case (12) in a manner to partition a radially outside part (26) from a radially inside part (30). The axial ends of the filter element are capped by the closed ends (18, 20) of the case. The inner winding turns exhibit a contour which prevents the inner winding turns from unraveling inward. In operation, the fluid moves across the filter element (14) in a generally centripetal direction. The filter element (14) is characterized in that it is devoid of a central core.—

Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance:

- The closest cited art—FR 2,554,799; Yee; Van Gilder; Thomas; and Morgan—fail to anticipate or render obvious, alone or in any proper combination, the claimed compactly wound absorbent tissue paper having the claimed inner winding turns, wherein the resulting filter element is axially positioned within a case such that the axial ends of the element are capped by ends of the case requiring the centripetal flow through the element and wherein the filter element is devoid of a core.
- Though FR '799 teaches a toilet tissue roll having the claimed inner winding turns (formed by compactly wounding) and each of the aforementioned U.S. references teaches a filtering system using a toilet tissue roll, none of the references teach the resulting element capped at both ends by the case such that flow is in a centripetal direction (radially toward the axis). The references of the prior art teach *axial flow between the plies* of the toilet tissue roll and also require a core.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims After Examiner's Amendment:

Claims 1-13. (Canceled).

14. (currently amended) The filter element system as claimed in claim ~~13~~ 26 wherein the tubular cylinder has a mean inside diameter greater than $1/20$ of a mean outside diameter of the tubular cylinder.

15. (currently amended) The filter element system as claimed in claim 14 wherein the mean inside diameter is greater than $1/4$ the mean outside diameter.

16. (currently amended) The filter element system as claimed in claim 15 wherein the mean inside diameter is between $1/3$ and $1/2$ the mean outside diameter.

17. (currently amended) The filter element system as claimed in any one of claims ~~13~~ 26, 14, 15 or 16 wherein the mean inside diameter cylinder is greater than 25 mm.

18. (currently amended) The filter element system as claimed in claim ~~13~~ 26 wherein the tubular cylinder has an inside wall which is conical or cylindrical in shape and has a circular or polygonal cross-sectional shape.

19. (currently amended) The filter element system as claimed in claim ~~13~~ 26 wherein the filter element further comprises at least one polarizing positioning means.

20. (currently amended) The filter element system as claimed in claim ~~13~~ 26 wherein said absorbent tissue paper material is a strip which is a continuous single sheet wound to provide the tubular cylinder.

21. (currently amended) The filter element system as claimed in claim ~~13~~ 26 wherein said absorbent tissue paper material is comprised of a series of sheets which are interlaced to provide the tubular cylinder.

22. (currently amended) The filter element system as claimed in claim ~~13~~ 26 or 20 wherein the sheet comprises several plies.

23. (currently amended) The filter element system as claimed in claim 21 wherein each sheet of said series of sheets comprises several plies.

24. (canceled)

25. (currently amended) The filter element system as claimed in claim ~~13~~ 26 wherein the filter system is constructed and arranged to filter automotive engine oil.

26. (New) A filter system for filtering a fluid comprising:

a cylindrical case comprising (i) a cylindrical sidewall extending about a central axis and having closed axial ends, and (ii) an inlet and an outlet; and

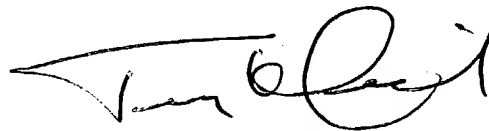
a filter element in the form of a tubular cylinder axially

positioned within said case such that axial ends of said filter element are respectively capped by said closed axial ends and the interior of the case is partitioned by said filter element into an inner radial part and an outer radial part; said filter element comprising an absorbent tissue paper material in sheet form compactly wound to form inner winding turns therein and to form said tubular cylinder, said inner winding turns exhibiting a contour which prevents the inner winding turns from unraveling inward, said filter element being devoid of a central core,

said inlet communicating with said outer radial part and said outlet communicating with said inner radial part such that fluid to be filtered flows in a centripetal direction from said outer radial part across said filter element and into said inner radial part.

Contact Information:

- Examiner Mr. Terry K. Cecil can be reached at (571) 272-1138 at the Carlisle campus in Alexandria, Virginia for any inquiries concerning this communication or earlier communications from the examiner. Note that the examiner is on the increased flextime schedule but can normally be found in the office during the hours of 8:30a to 4:30p, on at least four days during the week M-F.
- Wanda Walker, the examiner's supervisor, can be reached at (571) 272-1151 if attempts to reach the examiner are unsuccessful.
- The Fax number for this art unit for official faxes is 703-872-9306.
- Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mr. Terry K. Cecil
Primary Examiner
Art Unit 1723

TKC
November 18, 2004